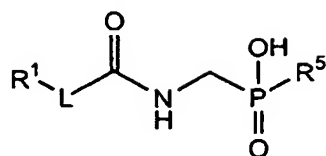


We claim:

1. A compound of the following formula:



or a pharmaceutically acceptable salt thereof, wherein

R^1 is phenyl or thien-2-yl, each optionally substituted;

L is a covalent bond, $-CH_2O-$, $-C(O)-$, or $-C(=N-OCH_3)-$; and

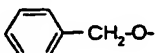
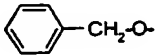

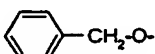

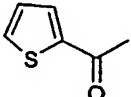
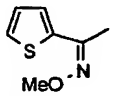

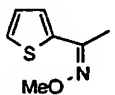
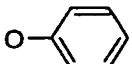
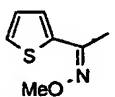
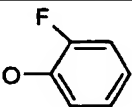
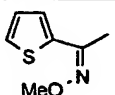
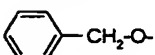

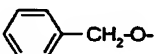
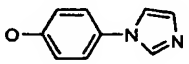
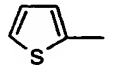
R^5 is -halo or $-OR^{10}$ wherein R^{10} is phenyl, pyridinyl, or quinolinyl, each optionally substituted,

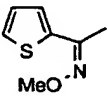
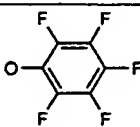
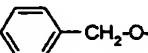
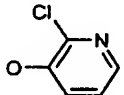
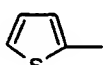
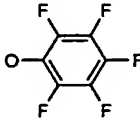
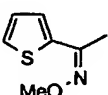
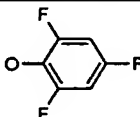
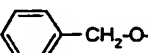
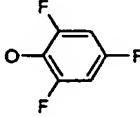
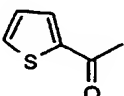
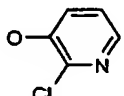
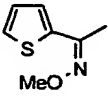
provided that when L is $-CH_2O-$, R^5 is not -F or *p*-nitrophenyl.

2. The compound according to claim 1 wherein the substituents are independently selected from $-NO_2$, $-CO_2H$, and halo.
3. The compound according to claim 1 wherein R^1 is unsubstituted.
4. The compound according to claim 1 wherein R^5 is selected from:

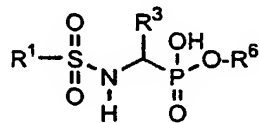
F				
			and	-H.

5. The compound according to claim 1 wherein R^1-L and R^5 are selected from the following combinations:

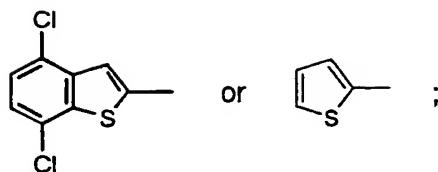
R ¹ -L-	R ⁵
	PNP
	
	
	PNP
	
	
	
	PNP
	
	
	PNP

R ¹ -L-	R ⁵
	
	
	
	
	
	
and	
	-OH

6. The compound according to claim 1 wherein the phosphonate moiety is replaced with a thiophosphonate moiety, provided that when R¹-L- is benzyloxy, R⁵ is not -O-PNP.
7. A compound of formula:



or a pharmaceutically acceptable salt thereof, wherein R¹ is



R^3 is -H or $-CO_2R^9$, wherein R^9 is $-C_1-C_3$ -alkyl;

R^6 is $-L^1-A-(L^2-B)_s$, wherein

L^1 is C_0-C_3 -alkyl optionally mono- to per-halogenated;

A is C_3-C_6 -cycloalkyl, aryl, or heteroaryl;

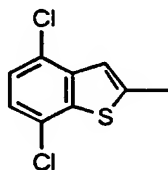
L^2 is a covalent bond or $(C_0-C_3\text{-hydrocarbyl})-X^1-(C_0-C_3\text{-hydrocarbyl})$, wherein X^1 is -
C(O)-, -NH-, -NH-C(O)-, -C(O)-NH-, or heteroaryl;

B is -H, C_3-C_6 -cycloalkyl, aryl, or heteroaryl; and

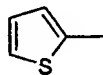
s is 0 or 1;

wherein when s is 0, $(L^2-B)_s$ is -H or halo, and A and B are independently optionally substituted with 1-3 moieties independently selected from the group consisting of halo, $-NO_2$, $-CO_2H$, -CN, $-C(O)NH_2$, $-SO_2NH_2$, or $-C_0-C_3\text{-hydrocarbyl}-Y-(C_1-C_3\text{-hydrocarbyl})$ wherein Y is a covalent bond, -O-C(O)-, -C(O)-, -O-, -S-, $-SO_2$, $-C(O)NH$, or $-NH-C(O)$; and each alkyl moiety is optionally mono- to per-halogenated.

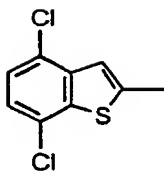
8. The compound according to claim 7 wherein R^3 is H and R^1 is



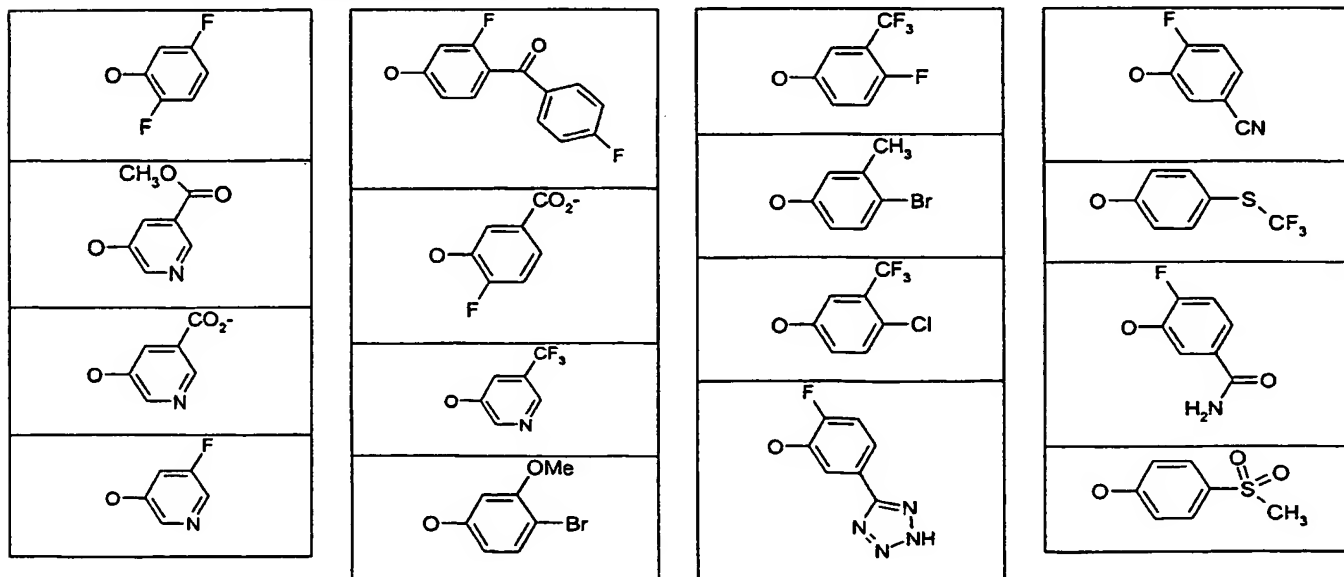
9. The compound according to claim 7 wherein R^3 is $-CO_2Et$ and R^1 is

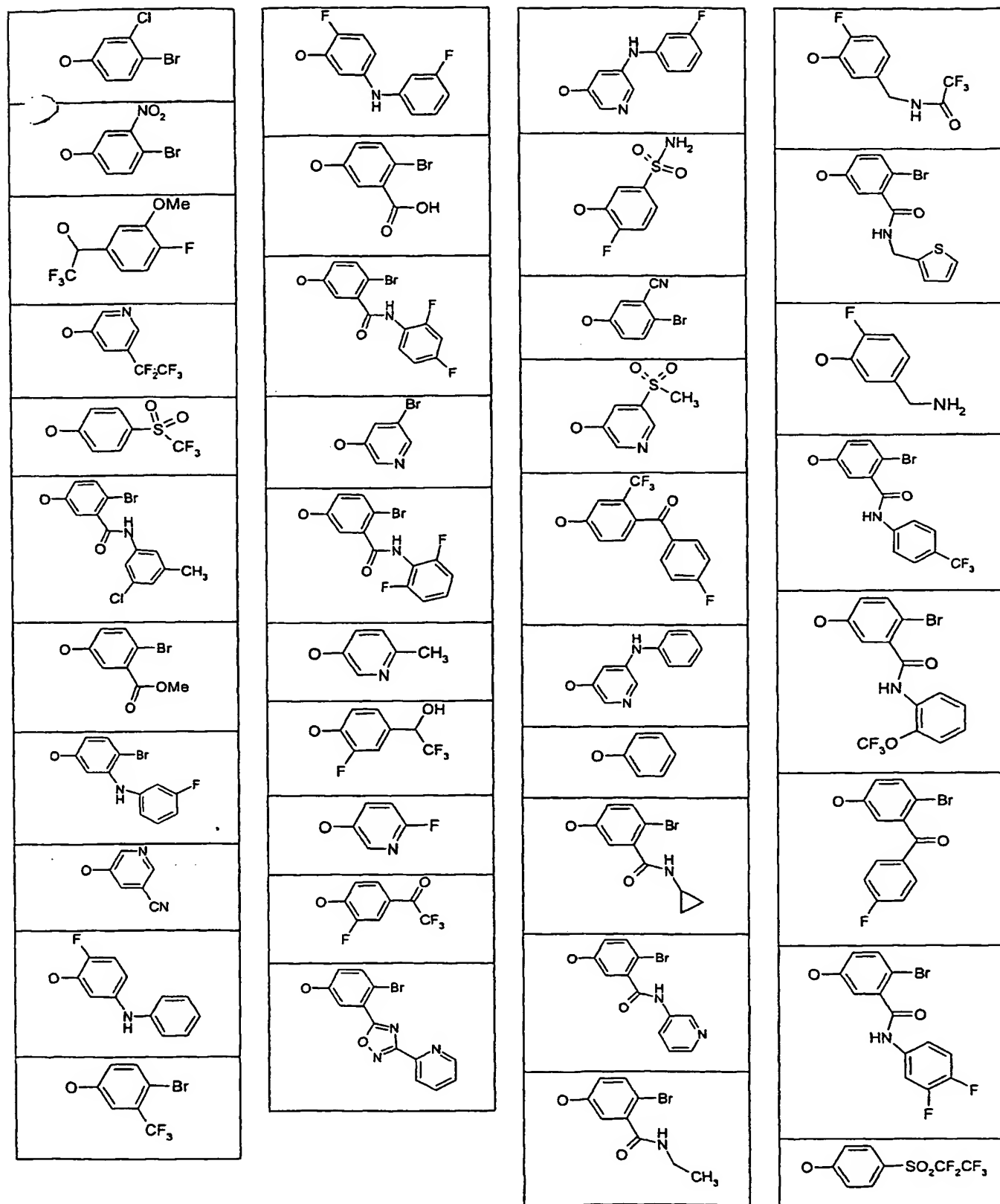


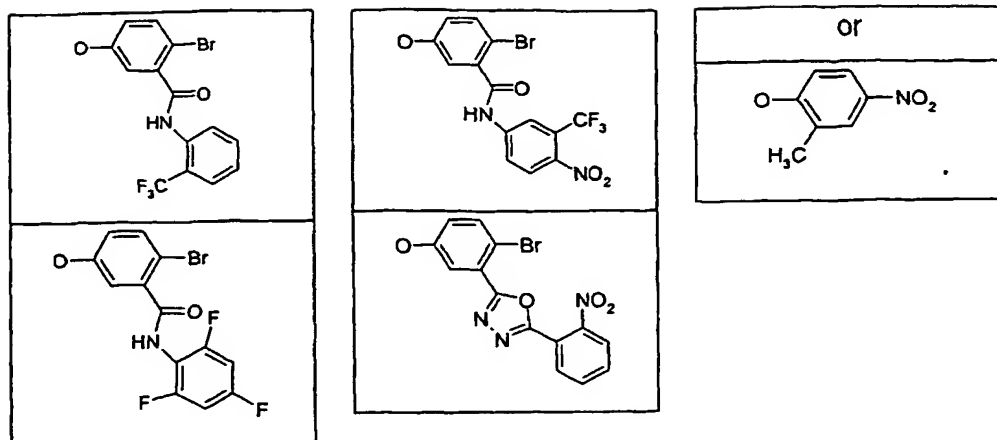
10. The compound according to claim 7 wherein L^1 is -O- and A is phenyl or pyridinyl, each optionally substituted, R^3 is H and R^1 is



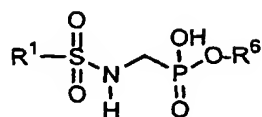
11. The compound according to claim 10 wherein A is pyridin-3-yl.
12. The compound according to claim 11 wherein s is 0.
13. The compound according to claim 11 wherein s is 1 and L² is -C(O)-, -C(O)NH-, -NH-, 1,2,4-oxadiazolyl, or 1,3,4-oxadiazolyl and B is phenyl, pyridinyl, cyclopropyl, or thienyl, wherein B is optionally substituted.
14. The compound according to claim 13 wherein the substituents on the A and B rings are independently selected from -F, -Cl, -Br, -CO₂H, -C(O)O-CH₃, -CF₃, -OCH₃, -OCF₃, -CH₃, -CN, -C(O)NH₂, -SCF₃, -SO₂CH₃, -NO₂, -CF₃CF₃, -SO₂CF₃, -SO₂CF₃CF₃, and -SO₂NH₂.
15. The compound according to claim 8 wherein one or both of the following are true:
 - a. A is selected from phenyl and pyridinyl;
 - b. B is selected from phenyl, tetraazolyl, cyclopropyl, pyridinyl, and thienyl.
16. The compound according to claim 9, wherein R⁶ is phenyl or p-nitro phenyl.
17. The compound according to claim 8 selected from those in which -OR⁶ is





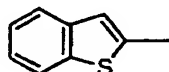


18. A compound of formula:



or a pharmaceutically acceptable salt thereof, wherein

R^1 is



optionally substituted with 1-3 moieties independently selected from the group consisting of -F, -Cl, -Br, -CO₂H, -C(O)O-CH₃, -CF₃, -OCH₃, -OCF₃, -C₁-C₆ alkyl, -CN, -C(O)NH₂, -S-CF₃, -SO₂CH₃, -NO₂, -CF₃CF₃, -SO₂CF₃, -SO₂CF₃CF₃, and -SO₂NH₂;

R^6 is -L¹-A-(L²-B)_s, wherein

L¹ is C₀-C₃alkyl optionally mono- to per-halogenated;

A is C₃-C₆-cycloalkyl, aryl, or heteroaryl;

L² is a covalent bond or (C₀-C₃-hydrocarbyl)-X¹-(C₀-C₃-hydrocarbyl), wherein X¹ is -C(O)-, -NH-, -NH-C(O)-, -C(O)-NH-, or heteroaryl;

B is -H, C₃-C₆-cycloalkyl, aryl, or heteroaryl; and

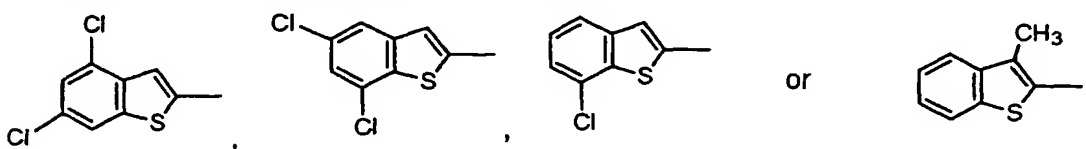
s is 0 or 1;

wherein when s is 0, (L²-B)_s is -H or halo, and A and B are independently optionally substituted with 1-3 moieties independently selected from the group consisting of halo, -CF₃, -NO₂, -CO₂H, -CN, -C(O)NH₂, -SO₂NH₂, or -C₀-C₃-hydrocarbyl-Y-(C₁-C₃-hydrocarbyl) wherein Y is a covalent bond, -O-C(O)-, -C(O)-, -O-, -S-, -SO₂-, -C(O)-NH-, or -NH-C(O)-; and each alkyl moiety is optionally mono- to per-halogenated.

19. The compound according to claim 18 wherein R^6 is phenyl optionally substituted with 1-3 moieties independently selected from the group consisting of halo, $-CF_3$, $-NO_2$, $-CO_2H$, $-CN$, $-C(O)NH_2$, $-SO_2NH_2$, or $-C_0-C_3$ hydrocarbyl- Y -(C_1-C_3 hydrocarbyl), wherein Y is a covalent bond, $-O-C(O)-$, $-C(O)-$, $-O-$, $-S-$, $-SO_2-$, $-C(O)NH-$, or $-NH-C(O)-$, and each alkyl moiety is optionally mono- to per-halogenated.

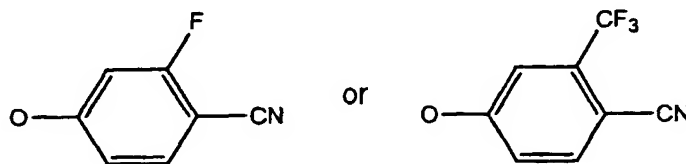
20. The compound according to claim 19 wherein R^1 is optionally substituted with 1 or 2 moieties independently selected from the group consisting of F, Cl, Br and C_1-C_6 alkyl.

21. The compound according to claim 20 wherein R^1 is

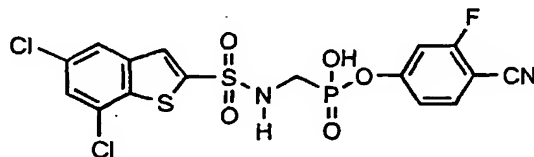


22. The compound according to claim 19 wherein R^6 is phenyl optionally substituted with 1 or 2 moieties independently selected from the group consisting of halo, $-CF_3$, and CN .

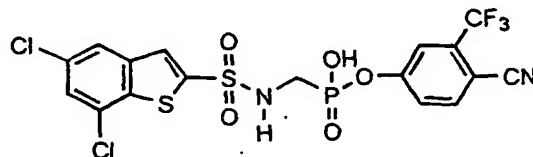
23. The compound according to claim 22 wherein the compound is selected from those in which $-OR^6$ is;



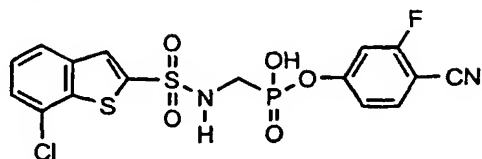
24. The compound according to claim 18 having the structure:



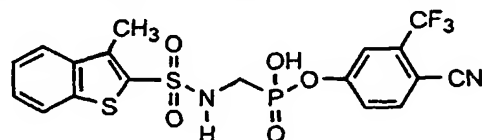
25. The compound according to claim 18 having the structure:



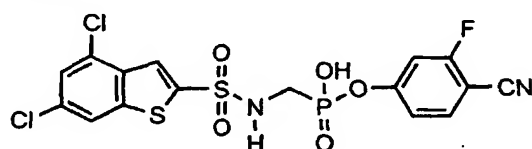
26. The compound according to claim 18 having the structure:



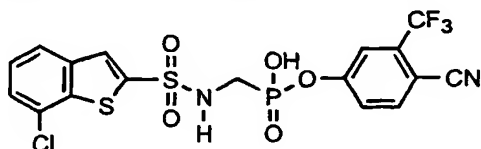
27. The compound according to claim 18 having the structure:



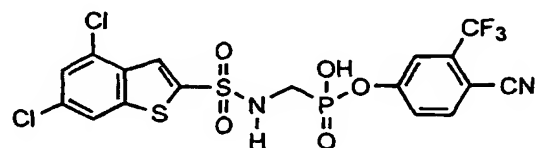
28. The compound according to claim 18 having the structure:



29. The compound according to claim 18 having the structure:



30. The compound according to claim 18 having the structure:



31. A composition comprising the compound according to any one of claims 1 to 30 and a pharmaceutically acceptable carrier or diluent.
32. A method of inhibiting β -lactamase, the method comprising contacting a cell with a compound according to any one of claims 1 to 30.